
APPLIED LEARNING STANDARDS

DRAFT INTERIM
CONTENT AND
PERFORMANCE
STANDARDS

THE CHALLENGE INITIATIVE

INTRODUCTION

The Challenge School District Reform Initiative calls on California's educators and parents to embrace a simple but powerful concept: school districts must set high content and performance standards for student achievement—stating clearly and publicly what each student should know and be able to do at the end of each year in each subject area. Schools are challenged to hold themselves accountable for results, reporting precisely how well their students are achieving and how many students are meeting the school district standards.

To further the Challenge Initiative, the following Draft Interim Content and Performance Standards, “Challenging Standards for Student Success,” have been developed in language arts, mathematics, history-social science, science, health education, physical education, visual and performing arts, foreign language, applied learning, service learning, and career preparation. Each set of standards includes an introduction, standards by grade level, examples of the types of work students should be able to do to meet the standards, and samples of specific activities or tasks that give students the opportunity to demonstrate that they can meet the standards. Some sets of standards also include samples of student work that meet the standards, and a few have short commentaries on these samples.

The draft Challenge Standards are a product of collaboration among representatives of school districts interested in the Challenge Initiative, curriculum specialists, teachers, and California Department of Education staff. Small working groups began the initial development of the standards in October 1995 and work on them continues, using as a basis the national standards including those from the New Standards Project; school district standards; California curriculum frameworks; and *Every Child a Reader* and *Improving Mathematics Achievement for All California Students*, the Superintendent of Public Instruction's 1995 task force reports on reading and mathematics. In December 1995 the working groups submitted their drafts to the California Department of Education. The complete set of draft Challenge Standards was distributed to representatives of the school districts interested in the Challenge Initiative at a meeting in Sacramento on December 14, 1995.

Several national and state reform efforts promote the development of standards. The New Standards Project, for example, builds on content standards developed by national professional organizations to design an assessment system based on world-class standards of student performance. Improving America's Schools Act of 1994 (IASA) requires school districts to measure student progress toward achieving rigorous state content and performance standards. California Assembly Bill 265, enacted in 1995, also requires the California State Board of Education to adopt academically rigorous statewide content and performance standards.

As part of the Challenge Initiative, participating school districts will now begin to (1) determine how the draft Challenge Standards relate to local standards, (2) gather samples of student work related to each standard, and (3) examine the student work to determine whether or not students are able to meet each standard.

When completed, the content and performance standards will establish a clear set of expectations for what students should know and be able to do at every grade level. These standards are in draft form and continue to be refined. Therefore, any comments are appreciated. General comments and questions about the draft Challenge Standards may be directed to the Assessment Office at (916) 657-3011. Specific comments and questions may be directed to the individuals listed below.

LANGUAGE ARTS

Division Director	Glen Thomas	(916) 657-3351 (916) 657-5021 FAX
Working Group Leader	Wendy Harris	(916) 657-5409 (916) 657-5021 FAX
Working Group	Diane Levin	(916) 657-5236 (916) 657-5021 FAX
	Nancy Sullivan	(916) 654-1123 (916) 657-5437 FAX

MATHEMATICS

Division Director	Glen Thomas	(916) 657-3351 (916) 657-5021 FAX
Working Group Leader	Wendy Harris	(916) 657-5409 (916) 657-5021 FAX
Working Group	Joan Akers	(916) 657-4276 (916) 657-5460 FAX

SCIENCE

Division Director	TBA	
Working Group Leader	Dave Hammond	(916) 657- 5373 (916) 657-3467 FAX

HISTORY-SOCIAL SCIENCE

Division Director	Glen Thomas	(916) 657-3351 (916) 657-5021 FAX
Working Group Leader	Wendy Harris	(916) 657-5409 (916) 657-5021 FAX
Working Group	Rod Atkinson	(916) 657-3153 (916) 657-5021 FAX

FOREIGN LANGUAGE

Division Director	Thaddeus Dumas	(916) 657-4399 (916) 657-4399 FAX
Working Group	Arleen Burns	(916) 657-5441 (916) 657-5021 FAX

VISUAL AND PERFORMING ARTS

Division Director	Thaddeus Dumas	(916) 657-4399 (916) 657-4399 FAX
Working Group Leader	Janice DeBenedetti	(916) 657-5315 (916) 657-5460 FAX
Working Group	Patty Taylor	(916) 654-5979 (916) 657-5460 FAX

HEALTH/PHYSICAL EDUCATION

Division Director	Thaddeus Dumas	(916) 657-4399 (916) 657-4399 FAX
Working Group	Jennifer Ekstedt	(916) 657-3387 (916) 657-3467 FAX
	Shirley Hazlett	(916) 657-2810 (916) 657-5149 FAX

CAREER PREPARATION/APPLIED LEARNING/SERVICE LEARNING

Division Director	TBA
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Career Preparation

Agricultural Education	Charles Parker	(916) 445-5636 (916) 445-5637 FAX
Business Education	Bernie Norton	(916) 445-5678 (916) 445-5639 FAX

Health Careers Education	Beverly Campbell	(916) 657-2541 (916) 657- 2638 FAX
Home Economics Careers and Technology	Janice DeBenedetti	(916) 657-5315 (916) 657-5460 FAX
Industrial and Technology Education	Chris Almeida	(916) 657-5425 (916) 445-5636 FAX
Applied Learning	Chris Almeida	(916) 657-5425 (916) 445-5636 FAX
Service Learning	Mike Brugh	(916) 653-7971 (916) 657-4969 FAX

APPLIED LEARNING STANDARDS

INTRODUCTION

Applied learning is a process of integrating one or more subject matter content areas (disciplines) under study with authentic (personal, home, career, community, society) learning experiences. The unique aspect of applied learning is the degree to which it provides experience in the problem solving process; the manipulative use of tools, equipment, materials and related techniques; personal skills; occupational awareness and safety; and employment literacy. This applied integration of learning contexts is applied learning's major function. Applied learning is an effective strategy for learning many of the skills and concepts embodied in the subject matter. It should be used whenever possible. Applied learning relates directly to content and performance standards developed for all subjects.

Applied learning is the delivery of curriculum within a relevant context. If learning experiences are to be challenging, coherent, and aimed at developing the full range of students' capabilities, then curriculum content and method must be interrelated and interconnected. Formerly separate disciplines must be seen as mutually dependent and jointly aimed at enriching the continual educational growth and development of each individual student. Schools and communities must view learning as an integrated activity, connecting ideas and understandings within and across disciplines and between school and performance environments outside of school. Applied learning must be embedded in the teaching and learning process, rather than "delivered" throughout a student's career out of context. It must be dynamic, rich with information about student capabilities, potentials and progress, and career preparation. It must be motivating to students, teacher, administrators, community individuals, and involve business and industry representatives. Applied learning illuminates content standards and the performance standards necessary for reaching them.

Applied learning is based on principles articulated in a wide range of program career path guide, program framework, and model curriculum standards documents. Applied learning:

- Is authentic, providing learners with tasks and situations that require higher-order thinking, and include applications of knowledge, elements of career awareness, career exploration, and complex, integrated (content) manipulative performances
- Provides multiple ways for students to demonstrate their knowledge and skill
- Enables teachers and their applied learning colleagues to assess student growth in a cumulative, longitudinal fashion, incorporating many kinds of evidence
- Is integrally tied to model curriculum standard documents

Applied learning standards are common across all grade levels. Specific activities and samples of student work are developed by grade level span to demonstrate age-appropriate delivery of Applied Learning standards

APPLIED LEARNING STANDARDS

KINDERGARTEN — GRADE FIVE

STANDARD 1:

Students will understand how to solve problems through a project design process. Students will design a product, service, or system to meet an identified need.

Examples of the types of work students should be able to do to meet the standard:

- Identify a need that could be met by a product, service, or system
 - Justify the need for the product, service or system
 - Design the product, service or system, researching relevant precedents and regulations
 - Test and evaluate the results of the product, service, or system
-

STANDARD 2:

Students will understand how to solve problems through planning and organization. Students will plan and organize an activity.

Examples of the types of work students should be able to do to meet the standard:

- Develop a proposal for an activity
 - Obtain approval for the activity to take place
 - Plan and organize all aspects of the event (e.g., inviting guests, booking a venue, advertising)
 - Oversee all aspects of the event through to completion
-

STANDARD 3:

Students will understand how to solve problems through teaching and learning. Students will develop and implement a teaching-learning program.

Examples of the types of work students should be able to do to meet the standard:

- Select a skill to teach to someone willing to learn it
 - Plan a sequence of learning activities
 - Obtain expert advice on the plan and adjust it as appropriate
 - Use the plan to teach the skill
 - Check what the person has learned
-

STANDARD 4:

Students will understand how to solve problems through meeting client needs. Students will conduct a commissioned project.

Examples of the types of work students should be able to do to meet the standard:

- Obtain a commission to conduct a project
 - Plan the project and ensure that the plan is consistent with the client's needs
 - Conduct the project and consult with the client on progress
 - Present the results to the client
-

STANDARD 5:

Students will understand how to solve problems through improving a system. Students will devise and test ways of improving the effectiveness of a system.

Examples of the types of work students should be able to do to meet the standard:

- Evaluate the effectiveness of a system
 - Identify possible improvements
 - Test-run the improvements
 - Evaluate the results
-

STANDARD 6:

Students will understand how to apply communication skills and techniques. Students will demonstrate ability to communicate orally and in writing.

Examples of the types of work students should be able to do to meet the standard:

- Make oral presentations
 - Prepare written reports
 - Translate information from one format to another
 - Use graphics to explain information or an idea
-

STANDARD 7:

Students will understand information technology tools and techniques. Students will use information technology to collect, analyze, organize and evaluate information from a variety of sources.

Examples of the types of work students should be able to do to meet the standard:

- Collect data related to the event
 - Analyze, organize, and evaluate the information
 - Prepare a report on a recent event in their life to share with the class using a computer
-

STANDARD 8:

Students will understand the importance of teamwork. Students will work on teams to achieve project objective.

Examples of the types of work students should be able to do to meet the standard:

- Participate as a team member and team leader
 - Select project topic
 - Assign roles consistent with student's ability and interest
 - Regularly report progress individually and as a team
-

STANDARD 9:

Students will understand personal skill development and its impact on their employability and success. Students will exhibit self-confidence, honesty, perseverance, self-discipline, and personal hygiene.

Examples of the types of work students should be able to do to meet the standard:

- Prepare research and written reports with accurate self-evaluations of student work, oral presentations and other activities
 - Effectively manage time and balance priorities
 - Meet deadlines and consistently complete all assignments
-

STANDARD 10:

Students will be aware of safety considerations in the work place and classroom. Students will use tools and operate equipment safely following established safety procedures.

Examples of the types of work students should be able to do to meet the standard:

- Identify equipment and its proper use
 - Demonstrate safe operation of equipment
 - Prepare report on the potential danger of improper use
-

STANDARD 11:

Students will understand career paths and strategies for obtaining employment within their chosen field. Students will select and participate in a career path and assume responsibility for professional growth.

Examples of the types of work students should be able to do to meet the standard:

- Present themselves effectively for an interview
- Develop an individual career plan
- Include the plan in their career preparation portfolio
- Provide a list of specific actions to prepare for entry-level employment in their chosen career path

Samples of specific activities or tasks that give students the opportunity to demonstrate that they can meet the standard:

- Students design, construct and write a simple flannel board counting story appropriate for preschool children; organize all aspects of a class trip to a local preschool to present flannel board counting stories; and teach premathematics number concepts and skills using counting stories, finger plays, and songs. (Applied Learning Standards 1, 2, 3)
- Students produce guidelines and recommendations for parents on selecting and purchasing appropriate school uniforms, and use word processing and graphics programs to produce a quality check list to use when shopping for the uniforms. (Applied Learning Standards 2, 4, 5, 6)
- Students design a plan to improve the system for collection of milk or lunch money and distribution of tickets for an elementary school classroom. (Applied Learning Standards 5, 6)

- Students present oral, written, and graphic recommendations to administrators, parents, and students on improving the data collection and distribution system. (Applied Learning Standards 6, 9)
- Students report on the step-by-step procedure and tools required to change a bicycle tire. (Applied Learning Standards 1, 2, 5, 7, 10)
- Students construct a weather station. (Applied Learning Standards 1, 5)
- Student use a desk top publishing program to produce a brochure advertising services available at the local library. (Applied Learning Standards 1, 2, 4, 6, 7)
- Students plan, select plants for, plant and maintain a flower bed after consultation with the principal and a guest speaker from a local nursery. They monitor the progress of the garden recording observations in a journal and creating class graphs of progress. They organize maintenance schedules, safe tool use and care, and tours for visiting Kindergarten classes. (Applied Learning Standards 1, 2, 3, 4, 6, 8, 9, 10, 11)
- Students learn the parts of a tooth and the chemical reactions of food on teeth. They then conduct an experiment in which animal teeth or “baby” teeth are submerged in foods, such as apple juice, soft drinks, and pasta sauce, and record their observations. (Applied Learning Standards 1, 6, 9)

APPLIED LEARNING STANDARDS

GRADE SIX — GRADE EIGHT

STANDARD 1:

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 - Design the product, service or system, researching relevant precedents and regulations
 - Test and evaluate the results of the product, service or systems
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STANDARD 2:

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STANDARD 3:

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STANDARD 4:

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STANDARD 5:

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Samples of specific activities or tasks that give students the opportunity to demonstrate that they can meet the standard:

- Students analyze the ball-handling activities of a school team; propose strategies for improving ball-handling skills; chart progress and evaluate results; present findings to coaches and health classes. (Applied Learning Standards 3, 4, 5, 6, 8, 9, 10)
- Student conduct a survey of the treatment of dental caries (cavities) over three generations. A class graph is created and students analyze the results: Determine why there may be a difference between generations, among cultures, or where people spend their childhood. (Applied Learning Standards 3, 6, 9, 10, 11)
- Students work in teams of five to teach a unit on handling animals safely to an elementary class using live animals, stories, and materials. (Applied Learning Standards 2, 3, 4, 6, 7, 8, 9, 10, 11)

- Students use desktop publishing software to produce an informational brochure about student organizations after gathering information from several organizations. (Applied Learning Standards 1, 3, 4, 7, 8, 9)
- Students write, illustrate and produce a children's Storybook to be used in a student planned and organized story time activity at a local elementary school. Students will compile guidelines for selecting books appropriate for various developmental levels and publish them in a brochure for parents. (Applied Learning Standards 1, 2, 3, 4, 6, 7, 8, 9, 11)
- Students interview people in various occupations from agriculture, hospitality, healthcare, business, manufacturing, and entertainment to reveal what they do, how they prepare for the job, and future employment opportunities. From reports on their findings students will select two or three occupations for further investigation. They will compare their skills with their requirements of the occupation and defend their selection of a potential career. (Applied Learning Standards 2, 3, 6, 7, 9, 10, 11)
- Students process an agricultural product, creating a salable item such as dried fruit or wreaths. Students will research the availability of local produce, decide on the product, research procedures and equipment needed, draw up a plan, present the plan for review and acceptance, organize a production crew, arrange for produce and supplies, process the produce, develop a sales strategy, and evaluate the results. (Applied Learning Standards 2, 3, 6, 7, 9, 10, 11)

APPLIED LEARNING STANDARDS

HIGH SCHOOL (GRADES 9-12)

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- Develop an individual career plan
- Include the plan in their career preparation portfolio
- Provide a list of specific actions to prepare for entry-level employment in their chosen career path

Samples of specific activities or tasks that give students the opportunity to demonstrate that they can meet the standard:

- Students design, research, develop specifications, and produce samples for a line of clothing to meet client's needs. They will prepare a sales presentation to recommend the line of clothing as meeting the client's needs and resources. (Applied Learning Standards 1, 4, 6, 7)
- Students conduct a facility use review of a local hotel to propose ideas that could increase the number of functions and activities booked by local residents; prepare an audio visual presentation supporting the ideas. (Applied Learning Standards 5, 6, 11)
- Students plan and prepare a demonstration concerning the safe use and operation of equipment currently found in the food service or fashion industry. (Applied Learning Standards 10, 11)
- Students research, prepare and present a transportation system proposal to their local planning commission using written, graphic, and oral presentation skills and techniques. (Applied Learning Standards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11)

- Students develop recommendations for a proposed change to a local forest or park based on the concerns of the community. Students propose and present the findings to their class. (Applied Learning Standards 1, 2, 3, 4, 5, 6, 7, 8, 9, 11)
- Students develop an electronic portfolio (on disc) featuring all of the components of the Career Technical Assessment Program portfolio (Letter of Introduction, Career Development Package, Work Samples with Summaries, Writing Sample). (Applied Learning Standards 1, 3, 4, 5, 6, 7)
- Develop a plan for professional growth in a selected career path, attend a professional organization meeting or trade show and make an oral presentation of activities and materials to the class. (Applied Learning Standards 6, 7, 9, 11)
- Students participate in a classroom presentation given by members of the physical therapy or sports medicine professions. Students are responsible for selecting and inviting the presenters, preparing the classroom, and providing the questions they wish to have answered about working in these fields. Question topics might include types of workers, scope of practice, average salary, work environment, education requirements, and future employment potential. Students write a brief review of why they would or would not like to work in this field. (Applied Learning Standards 3, 6, 9, 10, 11)
- Students access available technical data (i.e., major daily newspaper, *Wall Street Journal* or market reports over on-line data systems), individually or in groups; select commodities and keep a journal of daily prices. Using this journal and other pertinent data, students buy and sell agricultural commodities in a mock trading situation for a specified period of time. They record these transactions on a profit/loss sheet to calculate contract price, size and quantity, and trading commissions and use microcomputers to develop a written report. (Applied Learning Standards 6, 7, 8, 9, 11)
- Students design a transportation system for guests at an amusement park. They plan and organize the entire transportation system project incorporating total quality management (TQM) strategies, develop a proposal, obtain appropriate approvals, sequence activities and related events, and develop a budget for the project. They train members of a design team and use TQM methods to identify transportation system features including “depot” locations. They analyze and make recommendations for importing an existing transportation system, use computer-aided drafting/design software to draw and design the system, and use computer networks (databases) to research transportation system requirements. The final written report will be presented to the appropriate planning group using written, graphic, and oral presentation skills and technology. (Applied Learning Standards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11)